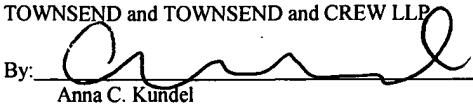


I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

TOWNSEND and TOWNSEND and CREW LLP

By: 
Anna C. Kundel

PATENT
Attorney Docket No.: 021396-000203US
Client Reference No.: AVI-000 CON

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Ivarie, et al.

Application No.: 10/696,671

Filed: October 28, 2003

For: NOVEL VECTORS IN AVIAN
TRANSGENESIS

Examiner: Kaushal, Sumesh

Art Unit: 1633

**INFORMATION DISCLOSURE
STATEMENT UNDER 37 CFR §1.97 and
§1.98**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. In accordance with 37 CFR §1.98(d), copies of the non-patent and foreign references can be found in parent Application No. 09/173,864, filed October 16, 1998 (Attorney Docket No. 021396-000200US).

It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR §1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no

01/24/2008 MESTA100000048 201430 1069671

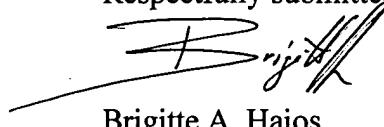
180.00 1M
01 FC:1006

representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

This IDS is being filed before the mailing date of the final Office Action or Notice of Allowance.

Please charge the IDS fee of \$180 to Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

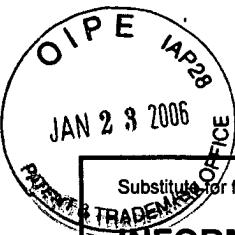
Respectfully submitted,



Brigitte A. Hajos
Reg. No. 50,971

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: 415-576-0200
Fax: 415-576-0300
BAH:ack

60675569 v1



Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
Sheet	3	of	5	Application Number	10/696,671
				Filing Date	October 28, 2003
				First Named Inventor	Ivarie, Robert D.
				Art Unit	1633
				Examiner Name	Kaushal, Sumesh
				Attorney Docket Number	021396-000203US

U.S. PATENT DOCUMENTS+					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code ² (if known)			
A1	US-4,959,317		09-25-1990	Sauer	
A2	US-4,997,763		03-05-1991	Hughes et al.	
A3	US-5,162,215		11-10-1992	Bosselman et al.	
A4	US-5,304,489		04-19-1994	Rosen	
A5	US-5,364,783		11-15-1994	Ruley et al.	
A6	US-5,378,618		01-03-1995	Sternberg et al.	
A7	US-5,464,764		11-07-1995	Capecchi et al.	
A8	US-5,487,992		01-30-1996	Capecchi et al.	
A9	US-5,677,177		10-14-1997	Wahl et al.	
A10	US-5,741,957		04-21-1998	Deboer et al.	
A11	US-5,784,992		07-28-1998	Petitte et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)		
A12	PCT	WO 90/11355		10-04-1990		<input type="checkbox"/>
A13	EPO	0 424 027	A1	04-24-1991		<input type="checkbox"/>
A14	EPO	0 424 044	A1	04-24-1991		<input type="checkbox"/>
A15	PCT	WO 94/20608		09-15-1994		<input type="checkbox"/>
A16	PCT	WO 95/11302		04-27-1995		<input type="checkbox"/>
A17	PCT	WO 97/47739		12-18-1997		<input type="checkbox"/>
A18	PCT	WO 98/01027		01-15-1998		<input type="checkbox"/>

NON PATENT LITERATURE DOCUMENTS						
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				T ²
	A19	ALLIOLI et al., "Use of retroviral vectors to introduce and express the β-galactosidase marker gene in cultured chicken primordial germ cells," <i>Developmental Biology</i> , 165:30-37 (1994).				<input type="checkbox"/>
	A20	ARCHER et al., "Human growth hormone (hgh) secretion in milk of goats after direct transfer of the hgh gene into the mammary gland by using replication-defective retrovirus vectors," <i>Proc. Natl. Acad. Sci. USA</i> , 91:6840-6844 (1994).				<input type="checkbox"/>
	A21	BAYLEY et al., "Exchange of Gene Activity in Transgenic plants catalyzed by the Cre-lox site-specific recombination system," <i>Plant Molecular Biology</i> , 18:353-361 (1992).				<input type="checkbox"/>

Examiner Signature	Date Considered
--------------------	-----------------

¹EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

² Applicant's unique citation designation number (optional). ³ Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				<i>Application Number</i>	10/696,671
				<i>Filing Date</i>	October 28, 2003
				<i>First Named Inventor</i>	Ivarie, Robert D.
				<i>Art Unit</i>	1633
				<i>Examiner Name</i>	Kaushal, Sumesh
Sheet	4	of	5	<i>Attorney Docket Number</i>	021396-000203US

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
	A22	BEATO, M. "Gene regulation by steroid hormones," <i>Cell</i> , 56:335-344 (1989).			
	A23	BONIFER et al., "Tissue specific and position independent expression of the complete gene domain for chicken lysozyme in transgenic mice," <i>The EMBO Journal</i> , 9:2843-2848 (1990).			
	A24	BOSELMAN et al., "Germline transmission of exogenous genes in the chicken," <i>Science</i> , 243:533-535 (1989).			
	A25	BRAZOLOT et al., "Efficient transfection of chicken cells by lipofection, and introduction of transfected blastodermal cells into the embryo," <i>Molecular Reproduction and Development</i> , 30:304-312 (1991).			
	A26	BRISKIN et al., "Heritable retroviral transgenes are highly expressed in chickens," <i>Proc. Natl. Acad. Sci. USA</i> , 88:1736-1740 (1991).			
	A27	BROWN et al., "Conformational alterations in the proximal portion of the yeast invertase signal peptide do not block secretion," <i>Mol. Gen. Genet.</i> , 197:351-357 (1984).			
	A28	BURNS et al., "Vesicular stomatitis virus G glycoprotein pseudotyped retroviral vectors: concentration to very high titer and efficient gene transfer into mammalian and nonmammalian cells," <i>Proc. Natl. Acad. Sci. USA</i> , 90:8033-8037 (1993).			
	A29	CHUNG et al., "A 5' element of the chicken β-globin domain serves as an insulator in human erythroid cells and protects against position effect in drosophila," <i>Cell</i> , 74:505-514 (1993).			
	A30	COSSET et al., "Improvement of avian leucosis virus (ALV)-based retrovirus vectors by using different cisacting sequences from ALVs," <i>Journal of Virology</i> , 65:3388-3394 (1991).			
	A31	COSSET et al., "Use of helper cells with two host ranges to generate high-titer retroviral vectors," <i>Virology</i> 193:385-395 (1993).			
	A32	DEAN et al., "Regulation of the chicken ovalbumin gene by estrogen and corticosterone requires a novel DNA element that binds a labile protein, chirp-1," <i>Molecular and Cellular Biology</i> , 16:2015-2024 (1996).			
	A33	DEELEY, et al., "Synthesis and deposition of egg proteins," eds Robert J. Etches, Ph.D., SC. and Ann M. Verrinder Gibbins, Ph.D., <i>Manipulation of the Avian Genome</i> , Boca Raton, CRC Press, 1993, pg. 205.			
	A34	DIERICH et al., "Cell-specificity of the chicken ovalbumin and conalbumin promoters," <i>The EMBO Journal</i> , 6:2305-2312 (1987).			
	A35	DUGAICZYK et al., "The ovalbumin gene: cloning and molecular organization of the entire natural gene," <i>Proc. Natl. Acad. Sci. USA</i> , 76:2253-2257 (1979).			
	A36	ETCHES et al., "Contributions to somatic and germline lineages of chicken blastodermal cells maintained in culture," <i>Molecular Reproduction and Development</i> , 45:291-298 (1996).			
	A37	FIERING, S., et al., "An "in-out" strategy using gene targeting and FLP recombinase for the functional dissection of complex DNA regulatory elements: Analysis of the β-globin locus control region," <i>Proc. Natl. Acad. Sci. USA</i> , September 15, 1993, Vol. 90, No. 18, pp. 8469-8473.			

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				<i>Application Number</i>	10/696,671
				<i>Filing Date</i>	October 28, 2003
				<i>First Named Inventor</i>	Ivarie, Robert D.
				<i>Art Unit</i>	1633
				<i>Examiner Name</i>	Kaushal, Sumesh
Sheet	5	of	5	<i>Attorney Docket Number</i>	021396-000203US

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T ²
	A38	FISHER et al., "Expression of exogenous protein and analysis of morphogenesis in the developing chicken heart using an adenoviral vector," <i>Cardiovascular Research</i> , 31:E86-E95 (1996).		
	A39	GANNON et al., "Organization and sequences at the 5' end of a cloned complete ovalbumin gene," <i>Nature</i> , 276:428-434 (1979).		
	A40	GU et al., "Deletion of a DNA polymerase β gene segment in T cells using cell type-specific gene targeting," <i>Science</i> , 265:103-106 (1994).		
	A41	HAECKER et al., "Repression of the ovalbumin gene involves multiple negative elements including an ubiquitous transcriptional silencer," <i>Molecular Endocrinology</i> , 9:1113-1126 (1995).		
	A42	JOHNSON et al., "pXeX, a vector for efficient expression of cloned sequences in <i>Zenopus</i> embryos," <i>Gene</i> , 147:223-226 (1994).		
	A43	KATO et al., "A far upstream estrogen response element of the ovalbumin gene contains several half-palindromic 5'-TGACC-3' motifs acting synergistically," <i>Cell</i> , 68:731-742 (1992).		
	A44	KAYE et al., "A close association between sites of Dnase I hypersensitivity and sites of enhanced cleavage by micrococcal nuclease in the 5'-flanking region of the actively transcribed ovalbumin gene," <i>The EMBO Journal</i> , 3:1127-1144 (1984).		
	A45	KOTANI, et al., "Improved methods of retroviral vector transduction and production for gene therapy," <i>Hum. Gene Ther.</i> , 1994, Vol. 5, pp. 19-28.		
	A46	LAI et al., "The ovalbumin gene: structural sequences in native chicken DNA are not contiguous," <i>Proc. Natl. Acad. Sci. USA</i> , 75:2205-2209 (1978).		
	A47	LIN et al., "Integration and germ-line transmission of a pseudotyped retroviral vector in zebrafish," <i>Science</i> , 265:666-669 (1994).		
	A48	LOBE et al., "Conditional genome alteration in mice," <i>BioEssays</i> , 20:200-208 (1998).		
	A49	LOGIE et al., "Ligand-regulated site-specific recombination," <i>Proc. Natl. Acad. Sci. USA</i> , 92:5940-5944 (1995).		
	A50	LOU et al., "Adenovirus-mediated gene transfer into tendon and tendon sheath," <i>Journal of Orthopaedic Research</i> , 14:513-517 (1996).		
	A51	LOVE et al., "Transgenic birds by DNA microinjection," <i>Bio/Technology</i> , 12:60-63 (1994).		
	A52	MOORE et al., "The development of β-lactamase as a highly versatile genetic reporter for eukaryotic cells," <i>Analytical Biochemistry</i> , 247:203-209 (1997).		
	A53	MORELLE, C., et al., "Recombinaison Homologue et Ciblage Genique BioFurur," No. 134, May 1, 1994, pp. 1, 3-12.		

Examiner Signature	Date Considered
--------------------	-----------------

¹EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

²Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				<i>Application Number</i>	10/696,671
				<i>Filing Date</i>	October 28, 2003
				<i>First Named Inventor</i>	Ivarie, Robert D.
				<i>Art Unit</i>	1633
				<i>Examiner Name</i>	Kaushal, Sumesh
Sheet	6	of	5	<i>Attorney Docket Number</i>	021396-000203US

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T ²
	A54	MOUNTFORD et al., "Dicistronic targeting constructs: reporters and modifiers of mammalian gene expression," <i>Proc. Natl. Acad. Sci. USA</i> , 91:4303-4307 (1994).		
	A55	MURAMATSU, T., et al., "Gene gun-mediated <i>in vivo</i> analysis of tissue-specific repression of gene transcription driven by the chicken ovalbumin promoter in the liver and oviduct of laying hens," <i>Molecular and Cellular Biochemistry</i> , August 1998, Vol. 185, No. 1-2, pp. 27-32.		
	A56	MYLLA, et al., <i>Biochem J.</i> , 1981, Vol. 196, pp. 683-692.		
	A57	NORDSTROM et al., "A complex array of double-stranded and single-stranded DNA-binding proteins mediates induction of the ovalbumin gene by steroid hormones," <i>The Journal of Biological Chemistry</i> , 268:13193-13202 (1993).		
	A58	OCHIAI et al., "Synthesis of human erythropoietin <i>in vivo</i> in the oviduct of laying hens by localized <i>in vivo</i> gene transfer using electroporation," <i>Poultry Science</i> , 77:299-302 (1998).		
	A59	ODELL et al., "Seed-specific gene activation mediated by the cre/lox site-specific recombination system," <i>Plant Physiol.</i> , 106:447-458 (1994).		
	A60	OTTEN et al., "The MMTV LTR promoter is induced by progesterone and dihydrotestosterone but not by estrogen," <i>Molecular Endocrinology</i> , 2:143-147 (1988).		
	A61	PALMITER, R.D., "Quantitation of parameters that determine the rate of ovalbumin synthesis," <i>Cell</i> , 4:189-197 (1975).		
	A62	PALMITER, R.D., "Rate of ovalbumin messenger ribonucleic acid synthesis in the oviduct of estrogen-primed chicks," <i>The Journal of Biological Chemistry</i> , 248:8260-8270 (1973).		
	A63	PARK et al., "Modulation of transcriptional activity of the chicken ovalbumin gene promoter in primary cultures of chicken oviduct cells: effects of putative regulatory elements in the 5'-flanking region," <i>Biochemistry and Molecular Biology International</i> , 36:811-816 (1995).		
	A64	ROOP et al., "Definition of the 5' and 3' ends of transcripts of the ovalbumin gene," <i>Cell</i> , 19:63-68 (1980).		
	A65	ROYAL et al., "The ovalbumin gene region: common features in the organization of three genes expressed in chicken oviduct under hormonal control," <i>Nature</i> , 279:324-331 (1997).		
	A66	RUCKER et al., "Cre-mediated recombination at the murine whey acidic protein (mWAP) locus," <i>Molecular Reproduction and Development</i> , 48:324-331 (1997).		
	A67	SANDERS et al., "Positive and negative regulatory elements control the steroid-responsive ovalbumin promoter," <i>Biochemistry</i> , 27:6550-6557 (1988).		
	A68	SANG, <i>TIBTECH</i> , 1994, Vol. 12, pp. 415-420.		
	A69	SAUER, B., "Manipulation of transgenes by site-specific recombination: use of cre recombinase," <i>Methods in Enzymology</i> , 225:890-900 (1993).		

Examiner Signature	Date Considered
--------------------	-----------------

¹EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

²Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				<i>Application Number</i>	10/696,671
				<i>Filing Date</i>	October 28, 2003
				<i>First Named Inventor</i>	Ivarie, Robert D.
				<i>Art Unit</i>	1633
				<i>Examiner Name</i>	Kaushal, Sumesh
Sheet	7	of	5	<i>Attorney Docket Number</i>	021396-000203US

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T ²
	A70	SCHWEERS et al., "A protein with a binding specificity similar to NF- κ B binds to a steroid-dependent regulatory element in the ovalbumin gene," <i>The Journal of Biological Chemistry</i> , 266:10490-10497 (1991).		
	A71	SIMKISS, "Transgenic birds, animals with novel genes," McLean ed., Cambridge Univ. Press NY, 1994, pp. 106-135.		
	A72	THORAVAL et al., "Germline transmission of exogenous genes in chickens using helper-free ecotropic avian leucosis virus-based vectors," <i>Transgenic Research</i> , 4:369-376 (1995).		
	A73	UYEDA et al., "Cloning and sequencing of hen magnum cDNAs encoding viteline membrane outer layer protein I (VMO-1)," <i>Gene</i> , 144:311-312 (1994).		
	A74	VICK et al., "Transgenic birds from transformed primordial germ cells," <i>Proc. R. Soc. Lond. B.</i> , 179-183 (1993).		
	A75	YEE et al., "Generation of high-titer pseudotyped retroviral vectors with very broad host range," <i>Methods in Cell Biology</i> , 43:99-112 (1994).		
	A76	ZHANG et al., "Inducible site-directed recombination in mouse embryonic stem cells," <i>Nucleic Acids Research</i> , 24:543-548 (1996).		
	A77	ZOLOTUKHIN et al., "A "humanized" green fluorescent protein cDNA adapted for high-level expression in mammalian cells," <i>Journal of Virology</i> , 70:4646-4654 (1996).		

Examiner Signature	Date Considered
--------------------	-----------------

¹EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

²Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.